IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Kitch et al.	**GROUP:**	1772
SERIAL NO:	10/848,818	**EXAMINER:**	P. Nordmeyer
FILED:	05/19/2004		
FOR:	SUBSURFACE PRINTED PRESSURE SENSITIVE COMPOSITE		

Mail Stop Amendment
Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

DECLARATION OF PHILIP R. EMERY

I, Philip R. Emery, one of the named inventors in the above-identified patent application, declare as follows:

1. In 1982, I was awarded a Bachelor of Science in Biology from the University of Massachusetts, Dartmouth (formerly Southeastern Massachusetts University), and in 1997, I was awarded a Master of Business Administration in Marketing from Western New England College.

2. From 1984-1989 I worked in acrylic pressure sensitive adhesive development and testing at Monsanto Chemical Company. From 1990-1997 I worked in Marketing and Technical Services for Monsanto, providing technical support and training internationally (India, Israel, Western and Northern Europe, and the USA) for acrylic pressure sensitive adhesives, vinyl acetate, acrylic-vinyl acetate, polyvinyl formal, and

other laminating adhesives. In 1997, Monsanto spun off most of its chemical business (including adhesives) to Solutia, Inc. I continued with the same responsibilities at Solutia until 1998, when I joined FLEXcon, Inc., the assignee of the above-identified application, as its product development manager for adhesives, a role which continues to today.

3. I have reviewed the above-identified patent application, the office action mailed on March 7, 2006, U.S. Patent Nos. 4,915,994 (Begelfer) and 6,086,995 (Smith), and European patent application No. 0 681 913 A1 (Avery).

4. The adhesive bonding layer 44 in Begelfer is not fully defined as to chemistry or adhesion characteristics, and thus, its bond strength might or might not be less than the yield strength of the facestock 14 and the tensile strength of both the facestock and the film component 42.

5. However, based on the extreme use conditions described in Begelfer, including retention of dimensional and structural stability at temperatures of up to 800°F, it is more likely that the preferred adhesive would be designed to permanently attach the film component 42 to the underlying facestock 14.

6. The bond strength necessary to achieve permanent attachment and resist the temperatures indicated would exceed the yield strength of the facestock 14 and the tensile strengths of both the facestock and the film component 42. Delamination would thus be accompanied by destruction of at least the facestock 14, and probably also the film component 42.

7. In Smith, the focus of the invention is a self wound product and the relationship of adhesive to a specified release layer rather than a concern for the separation of two film layers. The adhesives for layers 20 (Figure 4), 64 (Figure 5) and

74, 78 (Figure 6) are covered by a wide definition as to chemistry with little to no definition of resultant adhesion characteristics. Critical information is missing including to name a few, the method of adhesive curing, bond strength, and the internal (cohesive) strength of the adhesive polymer. Thus, one skilled in the art cannot ascertain bond strengths, which may or may not be adequately low so as not to exceed the yield strengths of the dimensionally unstable substrate layers 22, 66, 76, or the respective tensile strengths of the substrate layers and the dimensionally stable layers 10, 62, 72, 80.

8. It should be noted, however, that Smith also describes drying the adhesive layer of the dimensionally stable laminate at temperatures in the range from 190° to 280° F for about 5 to 20 seconds (Col. 6, lines 48-49), and the ability to retain dimensional stability after having been stored in a roll for 7 days at 158°F (Col. 14, lines 66-67; Col. 15, lines 1-3). In order to perform as described, it is likely that the preferred adhesives would be designed to permanently attach the layers, in which case the resulting bond strengths would again exceed the yield strengths of the dimensionally unstable layers, as well as their tensile strengths and the tensile strengths of the dimensionally stable layers.

9. Therefore, in my opinion, the examiner has incorrectly concluded that in Begelfer and Smith, it is inherent that "the bond strength at said interface is less than the respective tensile strengths of said facestock and carrier sheet and the yield strength of the said facestock."

10. For the reasons stated above, I am also of the opinion that the examiner incorrectly concluded that in Begelfer and Smith, it is inherent that "the bond strength as measured in accordance with FTM3 is less than 60, 100 or 200 grams per 2 inch width."

The undersigned declares further that all statements made herein of his own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

Date: June 14, 2006

Philip R. Emery